

NAVY MEDICINE LIVE

THE OFFICIAL BLOG OF U.S. NAVY AND MARINE CORPS HEALTH CARE • 2011 & 2012 WINNER OF BEST NAVY BLOG

Written on NOVEMBER 16, 2011 AT 8:30 AM by PROSS

“Gaming” the System: Study Looks at Standards for Small-Arms Waivers for Patients on Antidepressants

Filed under UNCATEGORIZED

(NO COMMENTS)

By Naval Center Combat & Operational Stress Control Public Affairs



A Sailor plays the video game, *Lethal Enforcers*, during the SSRI small arms study. While playing the game participants use a plastic light pistol to shoot foes, and avoid shooting friends, as they appear on screen in such different scenarios as target practice, a bank robbery or a getaway.

A firearm or deploy unless granted a waiver by a psychiatrist. “A couple of years ago, we realized we had no objective standards for when it is – or is not – appropriate to grant such a waiver,” says McLay. He conceived of the study and then brought it to Kurera, who now serves as principal investigator.

The study plans to enroll at least 100 participants through two phases of testing – before and after the administration of SSRIs. Each session consists of two tests: a Palm Pilot-administered measure of reaction time, concentration and judgment (Automated Neuropsychological Assessment Metrics, or ANAM), and – the fun part – a video game called *Lethal Enforcers*, in which participants use a plastic light pistol to shoot foes– and avoid shooting friends–as they appear on screen in such different scenarios as target practice, a bank robbery or a getaway.

While the SSRI study is cutting edge, the video game itself decidedly is not. *Lethal Enforcers*

Can a video game influence Navy policy? Cmdr. Rob McLay and Lt. Cmdr Heather Kurera, psychiatrists at Naval Medical Center San Diego, think so. With the help of researcher Massoud Nikkhoy of the Naval Center for Combat and Operational Stress Control, the study seeks to provide data to determine the effects of Selective Serotonin Reuptake Inhibitors (SSRIs) – commonly known as antidepressants – on a Sailor’s ability to safely use small firearms.

Current Navy policy states that no Sailor being treated with SSRIs may carry a

Navy Medicine Video

Navy Medicine is a global healthcare network of 63,000 Navy medical personnel around the world who provide high quality health care to more than one million eligible beneficiaries. Navy Medicine personnel deploy with Sailors and Marines worldwide, providing critical mission support aboard ship, in the air, under the sea and on the battlefield.

Navy Medicine Social Media

[twitter](#) Follow us on Twitter

[facebook](#) Join us on Facebook

[issuu](#) Read our publications

[flickr](#) View our photo stream

[YouTube](#) Watch our videos

Navy Medicine Live Archives

March 2015 (5)

February 2015 (16)

January 2015 (12)

December 2014 (17)

is played on a 15-year-old Sega Genesis system. Compared to contemporary games, *Lethal Enforcers* looks comically outdated. There is, however, good reason for using the Sega Genesis instead of its modern contemporaries.

For one, use of an outdated game significantly decreases the likelihood that participants would have played the game at home – eliminating learned skill as an unwanted variable in the study. More importantly, the older technology is actually *more* accurate for this particular scenario.

“The newer technology won’t let you use a light gun,” says McLay. “When you use a Nintendo Wii, you’re using a motion sensor, which may or may not be lined up with where the gun goes so you can’t really test the same way in terms of ‘aim-shoot’ on an accurate target on the newer systems.”

The Sega, if all goes as planned, will be replaced by more realistic simulators as a part of a larger study.

“Right now, we’re just trying to provide preliminary data on these issues,” McLay says, and eventually, no simulators at all because his hypothesis imagines that the psychiatric symptoms themselves will predict performance in firearm use.

“The neuropsychological measures will be used as a surrogate for the actual firearms performance,” he adds. “In other words, we’re not thinking that down the road every psychiatrist will need to use simulators.”

“Firearm use really boils down to reaction time, impulse control and hand steadiness. These traditional psychiatric measures should be able to predict your ability to shoot straight – and shoot the right people.”

← Next post

Previous post →

| |
|---------------------|
| November 2014 (11) |
| October 2014 (15) |
| September 2014 (20) |
| August 2014 (14) |
| July 2014 (13) |
| June 2014 (8) |
| May 2014 (11) |
| April 2014 (9) |
| March 2014 (14) |
| February 2014 (7) |
| January 2014 (7) |
| December 2013 (7) |
| November 2013 (12) |
| October 2013 (7) |
| September 2013 (14) |
| August 2013 (13) |
| July 2013 (11) |
| June 2013 (22) |
| May 2013 (15) |
| April 2013 (14) |
| March 2013 (14) |
| February 2013 (14) |
| January 2013 (12) |
| December 2012 (11) |
| November 2012 (11) |
| October 2012 (7) |
| September 2012 (9) |
| August 2012 (12) |
| July 2012 (13) |
| June 2012 (17) |
| May 2012 (22) |
| April 2012 (14) |
| March 2012 (13) |
| February 2012 (14) |
| January 2012 (13) |
| December 2011 (13) |
| November 2011 (20) |
| October 2011 (22) |
| September 2011 (12) |